

Chittenango Falls is also a Reservation State Park and has been improved by a foot bridge across the creek to a trail leading to the Scolopendrium station.

At Perryville the Scolopendriums are doing well—their fronds seem narrow and longer than at the other stations.

We counted, Dec. 5, 1925, 85 plants at Hanging Valley Gorge, which is now a Boy Scout Camp.—N. M. SADLER, J. B. TODD, *Syracuse, N. Y.*

FERNS AT DRIPPING SPRING, OKLAHOMA.—On May 3, 1925, Dr. John K. Small and I travelled by automobile from Tulsa, Oklahoma, to Fayetteville, Arkansas, and shortly before reaching the boundary between the two states passed a fenced-in area, into which tourists were invited to come, on payment of a small admission fee, to see the Dripping Spring. Expecting that some notable native plants might be preserved within the enclosure, we went in and spent an hour or so investigating the ravine into which the spring drips. No flowering plants of particular interest were in evidence, but eleven species of ferns were observed, including *Asplenium bradleyi* D. C. Eaton, new to the State. One of the two plants of the latter species seen was collected and deposited in the U. S. National Herbarium, but the recent appearance of an article on Oklahoma Pteridophytes by Mr. Greene¹ reminds me that it may be desirable to publish a note on the occurrence also.

As is frequent in the Ozarks, the surface rock at this point is chert, which gives rise to more or less acid soils, while the spring emerges along an underlying limestone stratum, the water and the soils at lower levels being correspondingly somewhat alkaline. At first sight there

¹ AMER. FERN JOURNAL 17: 125, 1927.

seemed to be little relation of the ferns to the soils, as all the species occurred to some extent at or near the ravine-floor; but on making tests it was found that many large masses of rock which had tumbled into the ravine had carried soils of different acidities, and the ferns each supported, down with them. This point deserves emphasis, because if actual tests had not been made, all the species would have been inferred to be growing in calcareous soils, and one more erroneous statement that *Asplenium bradleyi* occurs on limestone have been added to the several which have appeared in the literature in the past.

The species observed are listed here in the order of decreasing acidity exhibited by their soils at this locality:

Cheilanthes lanosa (Michx.) Watt. Abundant on chert ledges, occasional on fallen blocks; soil reaction subacid.

Asplenium bradleyi D. C. Eaton. Only two small plants were seen, on a large chert mass in front of the spring. The soil reaction was barely subacid, some neutralization of acidity by spray having evidently occurred. This no doubt also grows on the inaccessible chert ledges high above, and the soil may well be more acid there, the species showing mediacid preferences in other regions.

Asplenium platyneuron (L.) Oakes. Commonest on lower part of chert stratum, where the soil is high minimacid.

Cystopteris fragilis (L.) Bernh. Under overhanging chert ledges, back of spring; high minimacid.

Polystichum acrostichoides (Michx.) Schott. In woodland humus in vicinity; soil minimacid.

Asplenium trichomanes L. and *A. resiliens* Kunze. Chiefly on upper limestone outcrops, where the soil ranges from low minimacid to neutral.

Dryopteris marginalis (L.) Gray. In a variety of situations, but most common on talus where the soil is neutral or barely minimacid.

Camptosorus rhizophyllus (L.) Link and *Cystopteris bulbifera* (L.) Bernh. On the lower parts of the limestone strata, where the reaction ranges from neutral to minimalkaline.

Adiantum capillus-veneris L. In the minimalkaline spring water, forming a beautiful green curtain.

The impression obtained after taking the observations here placed on record was that, at this locality, the soil reaction is at least equal in importance to the moisture content in determining the locations of the individual species.—EDGAR T. WHERRY, *Washington, D. C.*

American Fern Society

Dr. Edwin Holmes Munger, a member of the Society since 1914, died at Hartford, Conn., Feb. 1, 1928, aged 58. He was born at Essex, Conn., and graduated from the Philadelphia Dental College in 1892. After practising his profession in other Connecticut towns, he settled in Hartford in 1900. There he built up a practice which kept him busily occupied during working hours and often into the evening; but he found time for many avocations. He was fond of mountain-climbing; his vacations were usually spent among the great hills, and though he never went far afield, there were none of the higher peaks of his own region, New England and the Adirondacks, which he had not ascended. He had a wide and keen interest in natural history. There was always a Wardian case of native ferns growing in his office and opposite it a case of clay-stones. He knew the birds uncommonly well, and minerals even better; he gathered a noteworthy collection of the latter, mostly